

Appln. No. 09/325,636
Amdt. Dated May 31, 2005
Reply to Office Action of April 8, 2005

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Cancelled)

2. (Currently Amended) A driving method for a solid-state image sensing device having a plurality of sensor portions arranged two-dimensionally in horizontal and vertical directions, and a vertical charge transfer portion adjacent said plurality of sensor portions provided with transfer electrodes comprising the steps of:

selectively applying high level driving pulses to groups of said transfer electrodes in a vertical transfer period; and

transferring signal charges read out from said plurality of sensor portions in the vertical direction;

wherein a period during a vertical transfer operation in which the number of groups of transfer electrodes receiving high level driving pulses becomes minimum is longer than that of other periods,

wherein individual groups of transfer electrodes are correspondingly associated with four systems and the vertical transfer period is divided into eight from periods t1 through t8, wherein periods t2, t4, t6 and t8, in which the number of groups of said transfer electrodes receiving high level driving pulses is two, are longer than the periods t1, t3, t5 and t7, in which the number of groups of said transfer electrodes receiving said high level driving pulses becomes three.

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3. (Cancelled)

4. (Previously Presented) A driving method for a charge transfer device having a charge transfer portion and transfer electrodes of a plurality of different groups disposed in the charge transfer direction, comprising the steps of:

selectively applying a high level driving pulse to said transfer electrodes in a transfer period; and

transferring signal charges in a charge transfer portion;

wherein a period during a charge transfer operation in which the number of groups of said transfer electrodes receiving high level driving pulses becomes minimum is longer than other periods,

wherein the groups of transfer electrodes are correspondingly associated with four systems and the vertical transfer operation is divided into eight periods from t1 through t8, wherein the periods t2, t4, t6 and t8, in which the number of groups of said transfer electrodes receiving high level driving pulses is two, are longer than the periods t1, t3, t5 and t7, in which the number of groups of said transfer electrodes receiving high level driving pulses is three.

5. (Cancelled)